Content Summary Grade 11 Reading Comprehension

Students in grade 11 read a variety of previously published fiction (e.g. narrative), non-fiction (e.g., general science and social science, history, essay, memoir, general interest, informational), and poetry. They are expected not only to understand the literal meaning of grade-appropriate text, but also to interpret meaning through complex processes of analysis, inference, and generalization. To read grade-appropriate text with comprehension, students in grade 11 must demonstrate the processes of:

Factual Understanding

- Understand stated information
- Determine the literal meaning of words or phrases

Inference and Interpretation

- Draw conclusions
- Infer traits, feelings, and motives of characters
- Infer relationships
- Interpret information in new contexts
- Interpret non-literal language

Analysis and Generalization

- Make generalizations and interpret non-literal language
- Determine the main idea of a text
- Identify the author's viewpoint or purpose
- Distinguish among facts, opinions, assumptions, observations, conclusions
- Recognize literary or argumentative techniques
- Analyze the style or structure of a text

At this level, the content and process dimensions of reading comprehension emphasize in equal proportions critical thinking through factual understanding, inference and interpretation, and analysis and generalization of grade-appropriate text.

Performance Level Descriptors Grade 11 Reading Comprehension

The performance level descriptors on the Achievement Levels Report for The Iowa Tests are provided to Iowa schools to describe the level of performance of groups and monitor progress in the distribution of performance over time. For each achievement level— High, Intermediate, and Low—descriptors on the report identify what the typical student in each level is able to do. Students in a particular level satisfy the standards described for performance in lower levels. Students at the High and Intermediate Performance Levels meet the standard for proficiency in reading for that grade.

High Performance Level: Understands stated information and ideas; infers implied meaning, draws conclusions, and interprets non-literal language; and makes generalizations from or about a text, identifies its author's purpose or viewpoint, and evaluates aspects of its style or structure.

Distinguished: Understands stated information and ideas; makes inferences about implied meanings, draws conclusions, and interprets non-literal language; and makes generalizations from or about a text, identifies its author's purpose or viewpoint, and evaluates aspects of its style or structure.

Accomplished: Usually understands stated information and ideas; makes inferences about implied meanings, draws conclusions, and interprets non-literal language; and usually makes generalizations from or about a text, identifies its author's purpose or viewpoint, and evaluates aspects of its style or structure.

Intermediate Performance Level: Sometimes understands stated information and ideas; sometimes infers implied meaning, draws conclusions, and interprets non-literal language; and sometimes makes generalizations from or about a text, identifies its author's purpose or viewpoint, and evaluates aspects of its style or structure.

Skilled: Usually understands stated information and ideas; usually makes inferences about implied meanings, draws conclusions, and interprets non-literal language; and often makes generalizations from or about a text, identifies its author's purpose or viewpoint, and evaluates aspects of its style or structure.

Moderate: Sometimes understands stated information and ideas; sometimes makes simple inferences about implied meaning, draws conclusions, and interprets non-literal language; and sometimes makes generalizations from or about a text, identifies its author's purpose or viewpoint, and evaluates aspects of its style or structure.

Low Performance Level: Seldom understands stated information and ideas; rarely infers implied meaning, draws conclusions, or interprets non-literal language; and rarely makes generalizations from or about a text, identifies its author's purpose or viewpoint, or evaluates aspects of its style or structure.

Marginal: Seldom understands stated information and ideas; rarely makes inferences about implied meaning or interprets non-literal language; and rarely makes generalizations from or about a text, identifies its author's purpose or viewpoint, or evaluates aspects of its style or structure.

Weak: Rarely understands stated information and ideas; rarely makes inferences about implied meaning or interprets non-literal language; and does not make generalizations from or about a text, identify its author's purpose or viewpoint, or evaluate aspects of its style or structure.

Content Summary Grade 11 Mathematics

Students in grade 11 must understand mathematical concepts and estimation strategies, solve multi-step problems, and interpret detailed graphical displays of data. They are expected to demonstrate reasoning in numerical, algebraic, and geometric representations, as well as word problems and graphical displays. The primary focus of the test is on fundamental concepts and quantitative reasoning skills. The content and process dimensions of mathematics knowledge in grade 11 include:

- Applying appropriate techniques, tools, and formulas to determine measurement
- Understanding the units, systems, and processes of measurement
- Selecting and using appropriate statistical methods to analyze data
- Making inferences or predictions based on data or information
- Interpreting data from a variety of sources
- Understanding and applying the basic concepts of probability
- Making reasonable estimates
- Evaluating the reasonableness of quantitative solutions
- Solving quantitative reasoning problems
- Using scientific notation to solve problems
- Using mathematical models to represent relationships
- Understanding patterns, relations, and functions
- Analyzing characteristics and properties of two-and three-dimensional geometric shapes

Performance Level Descriptors for Grade 11 Mathematics

The performance level descriptors on the Achievement Levels Report for The Iowa Tests are provided to Iowa schools to describe the level of performance of groups and monitor progress in the distribution of performance over time. For each achievement level— High, Intermediate, and Low—descriptors on the report identify what the typical student in each level is able to do. Students in a particular level satisfy the standards described for performance in lower levels. Students at the High and Intermediate Performance Levels meet the standard for proficiency in mathematics for that grade.

High Performance Level: Makes inferences with quantitative information and solves a variety quantitative reasoning problems; usually applies math concepts and procedures.

Distinguished: Applies math concepts and procedures, makes inferences with quantitative information, and solves a variety of quantitative reasoning problems.

Accomplished: Usually applies math concepts and procedures, makes inferences quantitative information, and solves a variety of quantitative reasoning problems.

Intermediate Performance Level: Sometimes applies math concepts and procedures, makes inferences with quantitative information, and solves a variety of quantitative reasoning problems.

Skilled: Sometimes applies math concepts and procedures, often makes inferences quantitative information and solves a variety of quantitative reasoning problems.

Moderate: Sometimes applies math concepts and procedures, makes inferences about quantitative information, and solves a variety of quantitative reasoning problems.

Low Performance Level: Seldom applies math concepts and procedures, makes inferences quantitative information, or solves quantitative reasoning problems.

Marginal: Seldom applies math concepts and procedures, makes inferences with quantitative information, or solves quantitative reasoning problems.

Weak: Rarely applies math concepts and procedures, makes inferences with quantitative information, or solves quantitative reasoning problems.

Content Summary Grade 11 Science

Students in grade 11 must understand scientific concepts from a variety of content areas: physics, chemistry, botany, zoology, health and medicine, and astronomy. They must be able to identify the research question of interest in a specific investigation, to select the best design to answer a specific research question, and to recognize appropriate conclusions that can be drawn from the results of an investigation. Students must also evaluate the adequacy of experimental procedures and distinguish among hypotheses, assumptions, and observations.

The content and process dimensions of scientific knowledge at this grade level include:

Classification by Content

- Biological Science/ Life Science
- Physical Sciences/ Earth and Environmental Science

Classification by Process

- Interpreting Information
- Analyzing Scientific Investigations
- Analyzing and Evaluating Information

Performance Level Descriptors Grade 11 Science

The performance level descriptors on the Achievement Levels Report for The Iowa Tests are provided to Iowa schools to describe the level of performance of groups and monitor progress in the distribution of performance over time. For each achievement level— High, Intermediate, and Low—descriptors on the report identify what the typical student in each level is able to do. Students in a particular level satisfy the standards described for performance in lower levels. Students at the High and Intermediate Performance Levels meet the standard for proficiency in science for that grade.

High Performance Level: Usually makes inferences or predictions from data, judges the relevance and adequacy of information, and recognizes the rationale for and limitations of scientific procedures.

Distinguished: Makes inferences or predictions from data, judges the relevance and adequacy of information, and recognizes the rationale for and limitations of scientific procedures.

Accomplished: Usually makes inferences or predictions from data, judges the relevance and adequacy of information, and recognizes the rationale for and limitations of scientific procedures.

Intermediate Performance Level: Sometimes makes inferences or predictions from data, judges the relevance and adequacy of information, and usually recognizes the rationale for and limitations of scientific procedures.

Skilled: Sometimes makes inferences or predictions from data, judges the relevance and adequacy of information, and recognizes the rationale for and limitations of scientific procedures.

Moderate: Sometimes makes inferences or predictions from data, judges the relevance and adequacy of information, and usually recognizes the rationale for and limitations of scientific procedures.

Low Performance Level: Seldom makes inferences or predictions from data, sometimes judges the relevance and adequacy of information, and rarely recognizes the rationale for and limitations of scientific procedures.

Marginal: Sometimes makes inferences or predictions from data, sometimes judges the relevance and adequacy of information, and rarely recognizes the rationale for and limitations of scientific procedures.

Weak: Seldom makes inferences or predictions from data, sometimes judges the relevance and adequacy of information, and rarely recognizes the rationale for and limitations of scientific procedures.